

## UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/809,205	03/25/2004	Toshimitsu Hirai	9319S-000717 5980		
27572 7590 11/30/2007 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828			EXAMINER		
			· TALBOT, BRIAN K		
BLOOMFIELD HILLS, MI 48303			ART UNIT	PAPER NUMBER	
	·		1792		
			MAIL DATE	DELIVERY MODE	
			11/30/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application	on No.	Applicant(s)				
Office Action Summary		10/809,20	05	HIRAI, TOSHIMITSU				
		Examiner		Art Unit				
	2	Brian K. T		1792				
	- The MAILING DATE of this communicati							
Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed or	n <u>17 September 2</u>	<u>2007</u> .					
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition	on of Claims							
4) Claim(s) 1,2,5 and 6 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1,2,5 and 6 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.								
Application	on Papers		`					
9) 🔲 -	The specification is objected to by the Ex	kaminer.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	nder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachment	(c)							
1) Notice 2) Notice 3) Inform	e of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-9 nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	948)	4) Interview Summar Paper No(s)/Mail I S) Notice of Informal C) Other:	Date				

Application/Control Number:

10/809,205

Art Unit: 1792

Page 2

1. The amendment filed 9/17/07 has been considered and entered. Claims 3,4 and 7-20

have been canceled. Claims 1,2,5 and 6 remain in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1,2,5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoi

et al. (6,017,259) in combination with Banno et al. (6,761,925).

Motoi et al. (6,017,259) teaches a method of manufacturing electron-emitting device,

electron source and image-forming apparatus. The electron emitting device is manufactured by

applying an ink containing a material for producing the electroconductive film to a

predetermined position of the substrate in the form of one or more drops by an ink jet apparatus.

drying and baking to form the electroconductive film. Applying a voltage to the electrodes to

produce and electron emitting region (abstract). Looking at Figs. 3A and 3B, Dots (4-1,4-2 and

4-3) are applied between the pair of electrodes (2,3). Ink A was applied to form the dots (4-1

and 4-3) while Ink B was applied to form the center column (4-2) (pg. 11, line 63 – col. 12, line

42 and example 2).

Motoi et al. (6,017,259) fails to teach forming the line pattern by forming the dots in a

line with a "space interval therebetween" and filling these "spaced intervals" with a second set of

drops to form the line segment.

Art Unit: 1792

Banno et al. (6,761,925) reference teaches that film droplets can be deposited in an arbitrary order and that "dots may be deposited at every other dot locations first, and then a dot may be further deposited in each space." (col. 37, lines 34 - 39).

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Motoi et al. (6,017,259) process by forming the side and center regions by depositing dots at every other dot location and then depositing in the space formed between the dots as evidenced by Banno et al. (6,761,925) with the expectation of achieving similar success.

## Response to Amendment

4. Applicant's arguments with respect to claims 1,2,5 and 6 been considered but have not been found to be persuasive.

Applicant argued that the prior art fails to teach forming "essentially simultaneously in a plurality of pattern forming areas to form at least two of the film patterns essentially simultaneously".

As noted in the Applicant's arguments, Motoi et al. (6,017,259) and Banno et al. (6,761,925) teach forming a single line pattern and not more than one "essentially simultaneously".

It has been well settled that generally, no invention is involved in the broad concept of performing simultaneously operations which have previously been performed in sequence. *In re* 

10/809,205

Art Unit: 1792

Tatincloux, 108 USPQ 125. In this case, Motoi et al. (6,017,259) and Banno et al. (6,761,925) teach forming a single line pattern and it would have been obvious for one skilled in the art at the time the invention was made to have modified Motoi et al. (6,017,259) and Banno et al. (6,761,925) process to form the line patterns "simultaneously" with the expectation of achieving similar results as well as the fact of reducing processing time by performing the process simultaneously.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number:

10/809,205

Art Unit: 1792

Page 5

BKTaibo 11/26/07 Brian K Talbot

**Primary Examiner** 

Art Unit 1762

BKT